Ψ

UNITED STATES PATENT AND TRADEMARK OFFICE

T·D

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,337	08/08/2001	Shell S. Simpson	10007652-1	1943

7590   12/19/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
DIVECHA, KAMAL B

ART UNIT	PAPER NUMBER
2151	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

DEC 1 9 2006

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/923,337
Filing Date: August 08, 2001
Appellant(s): SIMPSON ET AL.

Jack H. McKinney
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 19, 2006 appealing from the Office action

mailed May 26, 2006.

(1) Real Party in Interest

A statement identifying by name the real Party in Interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Li et al., US 2004/0205613 A1, published on October 14, 2004, but filed on July 17,

2001.

Todaka, U. S. Patent No. 6,785,022 issued on August 31, 2004, but filed on April 1,

1999.

NP L, Using Style Sheets to Publish XML to the Web by Alan Houser, published in 2000.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Specification

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to

adequately teach how to make and use the invention, i.e., failing to provide an enabling

disclosure.

The test to be applied under the written description portion of 35 U.S.C. § 112, first

paragraph, is whether the disclosure of the application as originally filed reasonably conveys to

the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat,

Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied

(Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

The applicants have failed to provide an enabling disclosure in the detailed description of

the embodiment. The specification is objected to under 35 U.S.C. § 112, first paragraph, as

failing to support the subject matter set forth in these claims.

The claims recite, "determining a desired format for a desired destination for the content;

and selecting an imaging conversion program from a plurality of imaging conversion programs

based on the style sheet **and** the desired format", however specification merely describes the

process of selecting am imaging conversion program to process the content (fig. 13 item #1350,

see page 62-65).

The specification does not describe or enable one of ordinary skilled in the art to make

and use the invention, specifically, the process of selecting an imaging conversion program from

a plurality of programs based on the style sheet and the desired format.

The process of "determining the desired format of the consuming service" has been

explicitly disclosed as "optional" (see fig. 13, step #1340, specification, page 64-65 [0184]).

In other words, the disclosed invention can be practiced without determining the desired

format of the consuming service, in which case, it would be impossible or nearly impossible to

achieve the overall process of selecting the imaging conversion program from a plurality of

programs based on the style sheet and desired format.

Furthermore, the usage of the term "and/or" in the specification (applicant specification,

page 65 [0185]) does not provide any enabling description, i.e. the specification fails to meet the

35 U.S.C. 112, first paragraph requirements, which explicitly states *"the specification shall contain a*

written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and

exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to

make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention".

In other words, in the specification, it would be unclear to the one of ordinary skilled in

the art to ascertain which one of the scenarios (those encompassed by "and/or", i.e. either A, B or

A and B) is actually disclosed and implemented.

More importantly, the specification has failed to describe the process of "selecting the imaging conversion program based on both the style sheet and the desired format in full, clear, concise and explicit terms as to enable any person skilled in the relevant art to make and use the disclosed invention (See 35 U.S.C. 112, first paragraph statute).

Hence, the above claim limitation presents the subject matter that that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, for the same reasons set forth in the specification above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-12, and 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by

Li (Pub. No.: US 2004/0205613).

As per claim 1, Li discloses a method for providing imaging conversion services on content

(See pg. 7 [0067] to pg. 8 [0070]), comprising the steps of: receiving content comprising non-image

data (par. 41, lines 2-4); obtaining a style sheet defining a conversion of the received content to a

converted content (par. 41, lines 4-7; par. 22, line 1, pg. 7 [0065]); determining a desired format for a

desired destination for the content (pg. 7 [0059], pg. 8 [0068]); selecting an imaging conversion

program from a plurality of imaging conversion programs based on a the style sheet and/or the

desired format (par. 52, lines 24-27; pg. 2 [0016], [0018], [0022], pg. 3 [0033], [0038], pg. 4

[0040]-[0041], pg. 5 [0049], pg. 7 [0059] and pg. 2 [0015-0024]); converting the content using

the selected imaging conversion program and the style sheet to obtain the converted content (par.

41, lines 10-11, pg. 7 [0067] to pg. 8 [0070]); and transmitting the converted content to a desired

destination (par. 42, lines 1-3, pg. 8 [0070]).

As per claim 2, Li discloses the process wherein the acts of receiving, obtaining, selecting, converting and transmitting are performed by a web service at a web site identified by a URL reference (par. 54, lines 1-4 and fig. 2).

As per claim 3, Li discloses that the content is obtained from a source web site that is different from the web service web site (par. 18, lines 3-4); and wherein the obtaining a style sheet step comprises receiving a style sheet from the source web site (par. 18, lines 3-6).

As per claim 4, Li discloses that the content is obtained from a source web site that is different from the web service web site (par. 18, lines 3-4); and wherein the obtaining a style sheet step comprises selecting a default style sheet (par. 41, lines 5-6).

As per claim 6, Li discloses that the criterion for the selecting a conversion program step selects a conversion program dynamically based on a negotiation taking place between the web service and a requestor and based on capabilities of each (par. 52, lines 24-27; par. 15, lines 1-3; and par. 16, lines 3-4).

As per claim 7, Li discloses that the transmitting step comprises the step of transmitting the converted content to a consuming web site or service (par. 45, lines 19-21).

As per claim 8, Li discloses that the transmitting step comprises transmitting the converted content to storage in a personal imaging repository (par. 42, lines 1-3).

As per claim 9, Li discloses that the transmitting step comprises transmitting a reference to the converted content, with the reference referring to the converted content (par. 41, lines 12-13).

As per claim 10, Li discloses that the selecting an imaging conversion step comprises associating a reference for the selected imaging conversion program to the content or to a reference for the content and making that content or the content reference accessible to a user, to thereby permit the

converting step to be performed on a demand basis (par. 18, lines 3-6; par. 16, lines 3-4; and par. 24, lines 3-5).

As per claim 11, Li discloses that the receiving content step comprises receiving a reference to the content and associating the content reference to a reference for the web service method and making this content reference accessible to a user, so that the conversion services may be performed on a demand basis (par. 18, lines 3-6; par. 16, lines 3-4; and par. 24, lines 3-5).

As per claim 12, Li discloses that the converted content is stored on the web service (par. 52, lines 34-37).

As per claim 17, Li discloses that said obtaining a style sheet step comprises allowing a user to configure a style sheet for use with the method (par. 24, lines 6-7).

As per claim 18, Li discloses that the transmitting step comprises transmitting the content to another service (par. 45, lines 19-21).

As per claim 19, Li discloses a system for providing imaging conversion services on content, comprising: a component for receiving content comprising non-image data (par. 41, lines 2-4); a component for obtaining a style sheet defining a conversion of the received content to a converted content (par. 41, lines 4-7; par. 22, line 1); a component for determining a desired format for a desired destination for the content (pg. 7 [0059], pg. 8 [0068]); component for selecting an imaging conversion program from a plurality of imaging conversion programs based on the style sheet and the desired format (par. 52, lines 24-27; pg. 2 [0016], [0018], [0022], pg. 3 [0033], [0038], pg. 4 [0040]-[0041], pg. 5 [0049], pg. 7 [0059] and pg. 2 [0015-0024]); a component for converting the content using the selected imaging conversion program and the style sheet to obtain converted

content (par. 41, lines 10-11); and a component for transmitting the converted content to a desired

location (par. 42, lines 1-3).

As per claim 20, Li discloses a program product on a computer readable medium for

implementing a method when executed on a computing system, the program product comprising: code

for providing imaging conversion services on content (par. 52, lines 24-27); code for receiving content

comprising non-image data (par. 41, lines 2-4); code for obtaining a style sheet defining a conversion of

the received content to a converted content (par. 41, lines 4-7; par. 22, line 1); code for determining a

desired format for a desired destination for the content(pg. 7 [0059], pg. 8 [0068]); code for selecting

an imaging conversion program from a plurality of imaging conversion programs based on a the style

sheet and the desired format (par. 52, lines 24-27, pg. 7 [0059] and pg. 2 [0015-0024]); code for

converting the received content using the selected imaging conversion program and the style sheet to

obtain the converted content (par. 41, lines 10-11); and code for transmitting the converted content to a

desired location (par. 42, lines 1-3).

As per claim 21, Li discloses that the converted content comprises an image (par. 34,

line 3).

As per claim 22, Li discloses that the converted content comprises an image (par. 34, line 3):

As per claim 23, Li discloses that the converted content comprises an image (par. 34, line 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li (Pub. No.: US

2004/0205613) in view of Todaka (U. S. Patent No. 6,785,022).

As per claim 5, Li does not disclose the process wherein the desired destination is a printer

having a parameter and wherein the desired format for the printer is related to that parameter.

Todaka, from the same field of endeavor discloses the process of converting a document to

make it compatible with a printer (i.e. it converts the document in order to enable the printer to print the

document, col. 4, lines 25-26).

Therefore it would have been obvious to person of ordinary skilled in the art at the time the

invention was made to modify Li in view of Todaka in order to print the document in a printer

compatible format.

One of ordinary skilled in the art would have been motivated because it would have enabled the

process of converting documents in order to make them compatible with a printer, as taught by Todaka.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (Pub.

No.: US 2004/0205613) in view of Houser ("Using Style Sheets to Publish XML to the Web").

As per claim 13, Li does not disclose the process of filtering the content to delete selected items

therein.

Houser, from the same field of endeavor, explicitly discloses the process of filtering the content

to delete the selected content by using style sheets (pg. 4 L31).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the

invention was made to incorporate the teaching of Houser as stated above with Li in order to filter the

content to delete selected items.

One of ordinary skilled in the art would have been motivated because these capabilities would

have provided a powerful mechanism, not only for customizing the publishing of documents, but for

transforming documents that can be displayed by any web browser (Houser, pg. 4).

As per claim 14, Li does not disclose the process of labeling different items in the content.

Houser discloses the process of labeling different items in the content (pg. 4 L30). Therefore it would

have been obvious to a person of ordinary skilled in the art at the time the invention was made to

incorporate the teaching of Houser as stated above with Li in order to label different items in the

content. One of ordinary skilled in the art would have been motivated because of the same reasons as

set forth in claim 13 above.

As per claim 15, Li does not disclose the process of reordering labeled content. Houser

explicitly discloses the process of reordering labeled content (pg. 4 L35). Therefore it would have been

obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the

teaching of Houser as stated above with Li in order to reorder labeled content. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 13 above.

As per claim 16, Li does not disclose the process of changing a layout of the content on a page. Houser explicitly discloses the process of changing a layout of the content on a page (pg. 4 L35). Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Houser as stated above with Li in order to change a layout of the content on a page. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 13 above.

(10) Response to Argument

The Examiner summarizes various arguments raised by the appellant and addresses

replies individually.

In an appeal brief, Appellant argues in substance that:

a.   The specification does describe the claimed subject matter in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention (See Brief, pages 4-5, Arg.

7. A.).

In response to argument [a], Examiner respectfully disagrees.

Independent claim 1 recites:

> A method for providing imaging conversion services on content, comprising the steps of:
>> receiving content comprising non-image data;
>> obtaining a style sheet defining a conversion of the received content to a converted
> content;
>> determining a desired format for a desired destination for the content;
>> selecting an imaging conversion program from a plurality of imaging conversion
> programs based on the style sheet <u>and</u> the desired format;
>> converting the content using the selected imaging conversion program and the style sheet
> to obtain the converted content; and
>> transmitting the converted content to the desired destination.

Applicant's originally filed specification states:

"...<u>note again that the style sheet is optional</u>; the URL parameters could contain

information about how data..." (pg. 63-64 [0182]).

"...<u>note that block 1340 is an optional step</u>. The content could simply be put into a
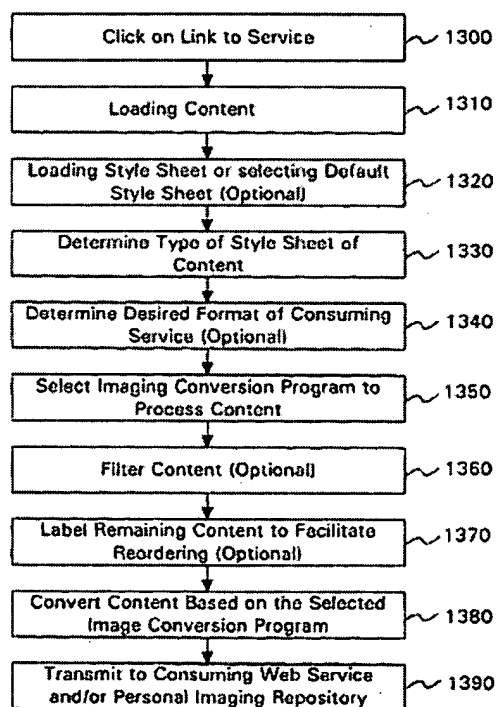
default format..." (pg. 65 [0184]).

First, applicant specification suggests that the "...<u>style sheet is optional...</u> (see page 63-

64 [0182]).

Secondly, applicant specification suggests that **the step of block 1340 of figure 13,** which is the process of determining the desired format of the consuming service, **is optional** (emphasis added) (see fig. 13, step #1340, specification, page 64-65 [0184]).

Figure 13 of applicant is further evident as indicating the process of converting the content is based on either the style sheet OR the desired format of the destination.

Fig. 13

Click on Link to Service	1300
Loading Content	1310
Loading Style Sheet or selecting Default Style Sheet (Optional)	1320
Determine Type of Style Sheet of Content	1330
Determine Desired Format of Consuming Service (Optional)	1340
Select Imaging Conversion Program to Process Content	1350
Filter Content (Optional)	1360
Label Remaining Content to Facilitate Reordering (Optional)	1370
Convert Content Based on the Selected Image Conversion Program	1380
Transmit to Consuming Web Service and/or Personal Imaging Repository	1390

The fact that the process of "determining the desired format of consuming service is optional" is evident that the disclosed invention does not select the particular image conversion program based on both style sheet and the desired format.

Furthermore, the term "and/or" in the specification fails to meet the 35 U.S.C. 112, first paragraph requirements, which explicitly states *"the specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention"*.

In the appeal brief (See remarks, pages 4-5, arg. 7.A.), Appellant alleges that the use of logical term "and/or" in specification clearly indicates "the imaging conversion program can be selected based on (a) the style sheet, (b) the desired format, OR (c) both the style sheet and the desired format information (See remarks, page 5, please note the specification does not describe this at all).

In response, Examiner recognizes the general use of the logical term "and/or" in the relevant art, however, unless clearly and concisely recited in the specification, the term "and/or" cannot be the basis for teaching and disclosing "the process of selecting the imaging conversion program from the plurality of programs based on the style sheet and the desired format".

The usage of the term such as "and/or" in the specification does not enable one of ordinary skilled in the art and therefore shall not be considered the basis for the enablement, because 35 U.S.C. 112, first paragraph explicitly states that the written description of the invention should be in clear, concise and exact terms (see 35 U.S.C. 112, first paragraph statute).

For example: When the condition "A and/or B" is recited into the claim, the claim is

typically and reasonably rejected under 35 U.S.C. 112, second paragraph simply because it

would be unclear to the one of ordinary skilled in the art to reasonably ascertain which one of the

subject (those encompassed by "and/or") the applicant is attempting to cover in the claims, i.e. is

it A?, or B? or A and B?, thereby rendering the scope of the claim(s) unascertainable. See

MPEP § 2173.05(d).

Similar reasoning applies when the term "and/or" is used in the disclosure without

defining the usage of the term. In other words, in the specification, it would be unclear to the one

of ordinary skilled in the art to ascertain which one of the above scenarios (those encompassed

by "and/or") is actually implemented, which will indeed lead to reasonably allege that the

specification has failed to disclose, teach or suggest the process inherited from the term "and/or"

in clear, concise and exact terms, thereby invoking the 35 U.S.C. 112, first paragraph.

Furthermore, the specification is strictly directed towards selecting the imaging

conversion program based on style sheets. Apart from paragraph [0185], there is no concrete

description whatsoever of the fact "selecting the imaging conversion program based on both the

style sheet and the desired format", and no description whatsoever of whether the process step is

software or hardware, because the invention is solely based on selecting the imaging conversion

program based on the style sheet.

Furthermore, Examiner is at total lost as to how will a single logical term such as

"and/or" will enable one of ordinary skilled in the relevant art to make and use the invention.

Hence, the claimed limitation "selecting the imaging conversion program based on both

style sheet and desired format" presents the subject matter situations that is/was not described in

the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For the at least the reasons set forth above, it is requested that applicant argument should be reversed and the rejection should be sustained.

b. Li does not disclose or suggest obtaining a style sheet defining a conversion of the received content to a converted content, determining a desired format for a desired destination for the content, and the selecting an imaging conversion program from a plurality of imaging conversion programs based on the style sheet and the desired format (See Brief, pages 5-6, Arg. 7. B.).

In response to argument [b], Examiner respectfully disagrees.

Independent claim 1 recites:

> A method for providing imaging conversion services on content, comprising the steps of:
> receiving content comprising non-image data;
> obtaining a style sheet defining a conversion of the received content to a converted content;
> determining a desired format for a desired destination for the content;
> selecting an imaging conversion program from a plurality of imaging conversion programs based on the style sheet and the desired format;
> converting the content using the selected imaging conversion program and the style sheet to obtain the converted content; and
> transmitting the converted content to the desired destination.

In support, Applicant's originally filed specification discloses:

[0179] WEB BASED CONVERSION SERVICE Referring now to Fig. 12, there is shown a basic configuration of a web site for a further embodiment of the present invention. The web site would include a processor 1200 under control of a program designed in accordance with the present invention, an optional cache storage 1210, and a network interface 1220 that receives an input from a network, which could be any network including an intranet or the Internet. The web site would further include one or more image conversion programs 1230, and one or more default style sheets 1240.

[0180] Referring now to Fig. 13, there is shown a preferred embodiment of the operation of the present invention in accordance with the program that controls the operation of the system. The first block 1300 represents an operation external to the image conversion web site of the present invention, and is typically under control of a user. In accordance with this block, a user clicks on or otherwise follows a link to the conversion web service. By way of example but not by way of limitation, a third party source web site could have a web page that provides a

link to the conversion web site of present invention. This link would preferentially be a URL and would include the network address of the conversion web site, the content to be converted, and the style sheet to use as part of the conversion process.

[0181] Moving to block 1310, when the link to the conversion web service of the present invention is selected, the conversion web service would retrieve the content to be converted and optionally, as represented in block 1320, load a style sheet from the referring web server. The content could comprise any form of graphics, including text, pictures, video, or any other form of content. The content could be obtained in any convenient manner, such as the conversion web service being passed a reference to the content and an optional style sheet by using parameters in the URL that the link represents. The conversion service may also retrieve this content and optional style sheet by using the referring page reference in the HTTP command that is sent by selecting the link and then optionally getting a reference to a style sheet by reading a tagged line in the content. It may also retrieve the content to be converted by reading a tagged line in the referring page's content. The reference to the content need not be a reference to the referring page's content, but may be a reference to some data that the referring page's content was based on. There are many techniques that may be used to retrieve the content and the optional style sheet. It is understood that all such techniques are within the scope of the invention. Note that in one embodiment, the reference to the content could be associated electronically with a reference to the conversion service, and the content reference with this association could be made accessible to the user via a clickable listing on a graphical user interface, or via a pull-down menu, or in some other convenient manner. Thus, the conversion service could be performed on the content at a later time on a demand basis. Note that the content reference associated with the conversion service could be stored in the user's personal imaging repository in one embodiment.

[0182] As noted above, the block 1320 represents the conversion web site obtaining a style sheet. The style sheet could be obtained from the source web site, or if no style sheet is transmitted, then a default style sheet may be selected from among the default style sheets 1240 or a style sheet could be obtained from a different location. The style sheet determines the look of the pages, which may include, by way of example, which items of content will be deleted and which items imaged, the order of the remaining content,, and the layout and format of that content. In one embodiment, a web page could be served to the user to allow him/her to select various options to go into a style sheet. For example, the user could select an option to remove all advertisements from the printed version of a web site. The user could also be presented with the option to remove all pictures and place them at the end of the content, i.e., the option to reorder the content. The user could also be presented with the option of converting the content to a PDF file, or to JPEG images, PostScript or to some other imaging format. The user could also be presented with the option of selecting a different font, or text, color, or background. For video, the style sheet could dictate, for example, that every 10th video frame could be selected and added to the imaging data. Note again that the style sheet is optional; the URL parameters could contain information about how data formatting would occur (style sheet reference, use a specific, default style sheet, or maybe even just the statements "no images" or "no advertisements").

[0183] The method would then move to block 1330, wherein the processor 1200 would determine the type of content. Most content typically has some kind of tag at the start of the content that identifies what kind of content it is (HTML, XML, etc...). This type could also be specified in a custom style sheet for the content.

[0184] The method would then move to block 1340, wherein a desired format for a destination consuming web service would be determined. For example, if the consuming web service selected by the user were a printer, then the method would determine/negotiate the format preferred by that printer for the content, for example, PDF files, or PCL6, or some other format that the printer may understand. Alternatively, the consuming/destination web site might be the personal imaging repository for the user. In this case, a preferred format for the selected default graphics store might be determined or a plurality of formats may be requested. In the foregoing example, the most convenient method for making such a determination is for the consuming web site to provide a URL that references web content that provides that format information. Note that block 1340 is an optional step. The content could simply be put into a default format, or a format specified by the style sheet.

[0185] The method would then move to block 1350, wherein it would be determined, based on the style sheet, and/or the desired format information from block 1340, or via another convenient method, which imaging conversion program to select and activate to process the content. Note that the reference to the content could be associated with a reference to the selected imaging conversion program, and this content reference associated with the conversion program could be made accessible to the user via a clickable listing on a graphical user interface, or via a pull-down menu, or in some other convenient manner. Thus, the converting step could be performed on the

content at a later time on a demand basis. Note that the content reference associated with the selected conversion program could be stored in the user's personal imaging repository in one embodiment.

The specification uses the logical term "and/or" in paragraph [0185], however, the specification neither provides any description on the use of the term "and/or" nor describes the process of selecting the conversion program based on both the style sheet <u>and</u> desired format in <u>full, clear and concise manner.</u>

For example: considering the situation "A and/or B", the situation and the term "and/or" can be interpreted and equated <u>to be either</u>:

(i) <u>A,</u>

(ii) <u>B, OR,</u>

(iii) <u>A and B.</u>

As per appellant (See brief, page 5), the logical term "and/or" in the specification <u>indicates</u> that the imaging conversion program can be selected based on (<u>please note</u> that the specification fails to describe this in full, clear and concise manner):

(i) the style sheet;

(ii) the desired format information, <u>OR,</u>

(iii) both the style sheet and the desired format information.

Since the specification fails to disclose the usage of term "and/or", the reasonable

interpretation can be achieved by incorporating the term "and/or" into the independent claims.

The claim will then recite:

> A method for providing imaging conversion services on content, comprising the steps of:
> receiving content comprising non-image data;
> obtaining a style sheet defining a conversion of the received content to a converted content;
> determining a desired format for a desired destination for the content;
> selecting an imaging conversion program from a plurality of imaging conversion programs based on the style sheet **and/or** the desired format;
> converting the content using the selected imaging conversion program and the style sheet to obtain the converted content; and
> transmitting the converted content to the desired destination.

<u>OR,</u>

> A method for providing imaging conversion services on content, comprising the steps of:
> receiving content comprising non-image data;
> obtaining a style sheet defining a conversion of the received content to a converted content;
> determining a desired format for a desired destination for the content;
> selecting an imaging conversion program from a plurality of imaging conversion programs based on: (a) the style sheet only, (b) the desired format only, **OR** (c) the style sheet and the desired format;
> converting the content using the selected imaging conversion program and the style sheet to obtain the converted content; and
> transmitting the converted content to the desired destination.

In other words, the limitation "selecting an imaging conversion program from a plurality

of imaging conversion programs can <u>be either</u> based on the style sheet (scenario A), or the

desired format (scenario B), OR, the style sheet and desired format (scenario C)".

<u>As acknowledged by the appellant,</u> Li is directed to automatic transformation of data

communicated between parties in a computing network. <u>Li teaches the use of a style sheet or</u>

<u>template</u> to transform a document from one format to another ([0041]). To implement Li's

method, Li discloses a server that includes a transformation web service intermediatery,

registration service, transformation service, forward service and receive service ([0052]).

Transformation service is a program responsible for transforming a document from one format to another ([0052]) (SEE BRIEF, pages 5-6, B.).

SCENARIO A (selecting conversion program based on style sheet):

In Li, <u>a template defines how to transform one data format into another</u> (Li, Abstract).

Li teaches the process of receiving a document transformation request, wherein the request includes a document to be transformed or an address or identifier of such a document, and a template to be used in the transformation of the document. The identification of the template may comprise one or more keyword/value pairs, which may be used to select the template. Or, recognition logic may be used to examine the document in order to <u>select a template</u> to be used in the transformation (Li, [0018]).

The <u>templates may be specified</u> using the style sheets, or <u>using software programs,</u> or using other approaches (Li, [0022]). In other words, <u>the templates are software programs</u> that transform one data format into another data format, i.e. conversion programs (Li, pg. 7 [0064], pg. 10, claim 16).

As phase I of the Invention, Li discloses a transformation template registration service ([0040]).

As phase II of the Invention, Li discloses an actual document transformation service ([0041]).

As phase III of the Invention, Li discloses the forward a transformed document service ([0042]).

Paragraph [0040-0041] of Li recites:

[0040] 1) Transformation template registration. This service enables a logic specification which describes one or more transformations to be registered and stored for subsequent use. These logic specifications are also referred to herein as "templates" or "template maps", and define mappings of data in one format to data in another format. Selection criteria may be associated with each registered template, if desired, to optimize the process of template selection at run-time during a transformation. The registration service preferably returns a registration handle or identifier which may be used to reference a stored template at run-time.

[0041] 2) Document transformation. This service performs the actual transformation from one format to another. An input document (or, alternatively, an address or identifier which can be used to locate the document) is supplied. A registration handle that identifies a particular stored template, a template, or a set of key/value pairs that will enable selecting an appropriate template is also supplied. This selection criteria can specify the input document itself as the identifier of the style sheet. If so, then the input document is scanned and the appropriate style sheet is selected and applied to the input document. After the transformation is complete, the transformed document and/or a locator handle may be returned to the requester.

[0042] 3) Forward a transformed document. A transformed document may be forwarded to a destination business partner using this service, on behalf of the source business partner (that is, the partner from which the input document originated). The forward service may be requested along with the transformation service, as a transform-and-forward composite service (as discussed below), or the forward service may be separately requested. In this latter case, the requester preferably supplies a locator handle to identify the stored transformed document to be forwarded.

Paragraph [0041] above clearly discloses the process wherein the template (i.e. a conversion program) is selected based on the identifier of the input document, wherein the input document is an identifier of the style sheet to be used in the conversion or transformation process (i.e. selecting a conversion program based on the style sheet). Further, the style sheet is selected and applied to the input documents, i.e. the content, and the transformed document is transmitted to the destination, as evident in paragraph [0041-0042].

Furthermore, paragraph [0065-0066] clearly indicates the process of selecting the conversion program based on the style sheet identifier.

As such, it is clear from the detailed passages that Li does teach the process of receiving

the content to be transformed, obtaining a style sheet to be used, and selecting the template, i.e. a

conversion program, based on at least the style sheet.

SCENARIO B (selecting conversion program based on desired format):

Li teaches the process of selecting and applying the template when the criteria are met

(note that the templates define one or more transformations, which are performed on the

documents) (Li, pg. 6 [0057]).

Consider the following paragraphs of Li: (page 7 and page 8)

[0058]   As an alternative to use of style sheets for templates, a stand-alone program or utility may be invoked to perform transformation from one data format to another.

[0059]   Developing style sheets and other forms of transformation logic specifications requires special skills, and this function may also be offloaded from the business partners to a professional third party service such as the entity which offers the web transformation services. Professional transformation template creation services may be offered where business partners may contract for template development (and optionally registration) of templates that will perform transformations between their various data formats. The techniques of the present invention enable application developers at the business partners to be shielded from knowing and accounting for each other's data formats. For example, suppose company A produces data for interoperating with company B and company C. Professionals at the template creation service may develop transformation templates that translate from A's format to B's format, and from A's format to C's format (and, typically, for reverse transformations of data destined for company A). When sending an outbound document to the web transformation services at run-time, company A preferably also provides an identifier of the target company which allows automatically selecting the correct transformation template. (As an alternative to supplying an identifier of the target company, in some cases other criteria may be used for this purpose. The optimal way to select a transformation template will depend on the particular implementation of the present invention and the characteristics of his customers and their data. The template registration and selection approach described herein enables a flexible and generic solution to be used, as will be described with reference to FIGS. 5 and 7.)

[0060]   Note that templates which have been registered by or on behalf of one company may in some cases be used for transforming documents received from other companies. Permissions or access rights may be used, if desired, to limit sharing of templates. Techniques for controlling access to stored information in this manner are well known in the art, and will not be described further herein.

[0061]   Logic which may be used to implement preferred embodiments of the web transformation services will now be described with reference to FIGS. 5-10.

[0062]   In FIG. 5, logic which may be used to implement a registration service for transformation templates is depicted. The registration process begins at Block 500 by receiving template registration information from a requester. Preferably, this information comprises a template (or, alternatively, an address or other identifier which may be used to locate a stored template), a requester identifier ("ID"), and recognition logic (or a specification of selection criteria) which may be used to determine when this template should be used. The recognition logic or selection criteria may alternatively be omitted, as the selection criteria may be contained within the template itself. For example, style sheet rules within a template may be evaluated to determine whether any of the actions specified in the style sheet are applicable. (Note that a template may also be explicitly identified on a transformation request, as shown in FIG. 7, in which case the template may be considered as implicitly registered and the use of recognition logic is therefore not required.)

alternatively, an address or reference which enables locating the document), the requester's ID, and one of (i) a template to use in the transformation, (ii) a registration handle or other identifier of a previously-stored template, or (iii) parameter values for matching against previously-stored recognition logic to select a stored template. The optional requester information is validated (Block 710), and if invalid, an error message or code is preferably returned (Block 720) to the requester. Otherwise, when the requester passes the validation, Block 730 checks to see if a registration handle was passed as input. If so, then this handle is used to select and retrieve a pre-compiled template from the transformation cache (Block 740), and processing continues to Block 770. When a registration handle was not passed, Block 750 checks to see if values to use with recognition logic were passed. If so, then these values are used to retrieve a stored template (Block 760); otherwise, the depicted logic assumes that a template was passed, and control transfers directly to Block 770 to apply this template. (If desired, an additional test may be implemented when Block 750 has a negative result to determine whether a template was in fact passed, and if not, an error message may be generated and returned to the requester.)

[0068] As an example of using values with recognition logic, a parameter value might be passed on the transformation service request which identifies a target recipient of the document to be transformed. If a template has been registered which uses company identifier as a selection criterion, and if this passed parameter value matches one of the values which may have been specified as an appropriate value for the company identifier during the registration process, then this template may be selected. Selection criteria and/or values may be used to organize stored templates for efficient retrieval, if desired. Such organization techniques will be obvious to one of skill in the art, and do not form part of the inventive concepts of the present invention.

Paragraph [0059] expressly discloses the method which enable application developers at

the business partner to be shielded from knowing and accounting for each other's data formats.

For example, suppose company A produces data for interoperating with company B and

company C. Professionals at the template creation service may develop transformation templates

that translate from A's format to B's format, and from A's format to C's format (and, typically,

for reverse transformations of data destined for company A). When sending an outbound

document to the web transformation services at run-time, company A preferably also provides an

identifier of the target company which allows automatically selecting the correct transformation

template, i.e. a conversion program, at least based on the desired format, wherein the desired

format is identified through the target company's identifier.

Paragraph [0068] further indicates the process of identifying a target recipient of the

document to be transformed, and if the template has been registered which uses company

identifier as a selection criteria...then this template may be selected...for transformation.

The registration process in Li registers the appropriate templates, i.e. template needed in

order to transform the format of company A to format of company B, and when the request for

transformation service is received, the transformation system identifies the target format, i.e.

desired format, by identifying the target recipient of the document and selects the appropriate

template, i.e. conversion program based on the required format of the destination.

As such, It is clear that Li does teach the process of receiving the content to be

transformed, determining the desired format for the destination, and selecting the template, i.e. a

conversion program, based on the desired format in order to transform the received document

into the desired format or the format utilized by the destination.

SCENARIO C (selecting conversion program based on both style sheet and desired format)

In an event where the appellant did disclose the process of "selecting an imaging conversion program from a plurality of imaging conversion programs based on the style sheet and the desired format" (Examiner disagrees), Li clearly discloses the process as set forth herein.

As set forth in scenario A, templates are specified using the style sheets.

As set forth in scenario B, templates are selected based on the desired format of the destination, wherein the templates are specified using the style sheets.

The fact that the templates are selected based on the desired destination format, and wherein the templates are specified using the style sheets, directly implies that the templates (i.e. conversion programs) are indeed selected based on both style sheets and the desired format.

Furthermore, without knowing the desired data format or destination data format, It would not be practical to arrive at the invention as disclosed by Li, which is strictly directed towards solving problems of the interoperability and incompatibility, i.e. solving the problem faced by different business partners or companies that utilizes different data formats.

Li, as set forth above, solves the problems of interoperability of different data communication systems by transforming the document from one format to another that is compatible with the destination.

Technical Example:

In Li, the style sheet such as XML2HTML.xsl is registered by the one of the business

partner as templates (this style sheet may, for example, transform xml documents to HTML

pages). A style sheet identifier having value "XML2HTML" is passed as a parameter of the

registration request, along with the requestor ID. The style sheet identifier may be used as a

selection criterion for subsequent selection of this style sheet. For example, when a

transformation request is received, "XML2HTML" may be passed as a parameter to identify the

desired transformation (see the passage below).

[0064] A copy or image of the template is created (Block 530). For style sheets and other appropriate templates, a pre-compilation process is preferably performed as an optimization such that the template is in an executable (e.g. object) form in advance of its selection and use. The image is stored (Block 540) along with the recognition logic (if any), in the transformation registry or cache. A registration handle or identifier is then generated (Block 550) to use in identifying the stored template, and this registration handle or identifier is preferably returned to the requester (Block 560), after which the registration processing of FIG. 5 ends.

[0065] FIG. 6A illustrates a sample HTTP POST request message 600 used to transmit a SOAP message that invokes the registration service of the present invention. The XML tag 610 "registerStylesheet" provides an example of syntax that may be used to identify this as a style sheet registration request. In this example, a style sheet stored at Uniform Resource Locator ("URL") "http://localhost/temp/XML2HTML.xsl" is identified as the template being registered, as shown at 620. (This style sheet may, for example, transform XML documents to HTML pages.) A style sheet identifier having value "XML2HTML" is passed as a parameter 630 of this registration request, along with a requester ID "Administrator" 640. The style sheet identifier may be used as a selection criterion for subsequent selection of this style sheet. For example, when a transformation request is received, "XML2HTML" may be passed as a parameter to identify the desired transformation. The requester ID may be used to identify the user or entity requesting the registration service. In preferred embodiments, only authorized entities are allowed to invoke web transformation services, as discussed above.

[0066] Upon receiving a style sheet for registration, or as in the example of FIG. 6A, receiving a URL identifying a network-accessible style sheet, the style sheet is preferably pre-compiled and cached at the server on which the web transformation services are provided. If the registration is successful, a handle or other identifier is preferably returned to the requester. FIG. 6B illustrates a sample HTTP response 650 that may be issued after processing the registration request 600 of FIG. 6A. In this example response 650, XML tag 660 "registerStylesheetResponse" is an example of syntax which may be used to identify this as a style sheet registration response, and a style sheet identifier is returned as a parameter 670 to confirm that "XML2HTML" has been successfully registered.

As set forth herein, a template having <u>XML2HTML</u> style sheet is selected, wherein the selected template is for converting the XML documents to HTML documents, wherein the HTML is the desired data format.

Without knowing the desired data format of a business partner, how does Li's system perform transformation? More importantly, without knowing the incoming format, destination or desired format and the style sheet, how does Li's system perform the process of transforming the document from one data format to another?

In data transformation, knowing and determining the data formats of all the data communication system is a key.

Therefore Li does indeed teach the process of selecting the template, i.e. conversion program, based on the style sheet and the desired data format by passing the style sheet identifier as a selection criteria, wherein the identifier is "XML2HTML" which selects the template, i.e. conversion program, for performing the transformation of the document from XML data format to HTML data format, wherein the HTML is the desired data format. In other words, the style sheet identifier informs the transformation service the type or specific style sheet to use and the desired data format in form of the identifier.

As such, Li, Todaka and Houser discloses each and every limitation of the claimed subject matter in the present application.

For the at least reasons set forth above, it is requested that the applicant's arguments should be reversed and the rejection should be sustained.
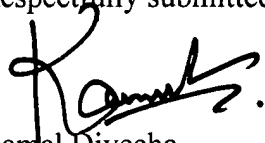
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.
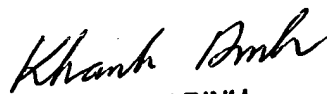
Respectfully submitted,

Kamal Divecha
Art Unit 2151
December 5, 2006.

Conferees:

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER

KHANH DINH
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100